

**Search strategies for  
Melatonin for neurodevelopmental disorders and non-respiratory sleep disorders  
Preliminary searches prepared 3 June 2022**

**Cochrane Central Register of Controlled Trials (latest issue) in the Cochrane Library**

- #1 MeSH descriptor: [Neurodevelopmental Disorders] explode all trees  
 #2 MeSH descriptor: [Central Nervous System Diseases] explode all trees  
 #3 MeSH descriptor: [Intellectual Disability] explode all trees  
 #4 (((neurodevelopment\* or neurotic\* or development\* or mental\* or central nervous system or cns or intellectual\* or ((disruptive or child) and behavio\*) or Communicati\* or speech\* or language or Learning or Motor\* or psychomotor or Reactive Attachment\* or Stereotypic Movement\*) and (disease\* or disorder\* or disabilit\* or syndrom\* or dysfunc\* or impair\* or deficienc\* or retardation\*)) or neurodisabilit\* or neuro-disabilit\* or idiocy or dyslexia or dyscalculia or autis\* or kaunner\* or ASD or Asperger\* or attention deficit\* or ADHD\* or ADDH or hyperactivity\* or impulsiv\* cerebral pals\* or spastic displeg\* or epilep\* or mutism\* or tic\* or Tourette\* or ((happy or child\*) and puppet\*) or fragile x or Frax\* or angelman\* or prader-willi\* or rett\* or smith-magenis or williams or Cri-du-Chat or De Lange or down\* or Coffin-Lowry or Lesch-Nyhan or Menkes Kinky Hair or Rubinstein-Taybi or WAGR or schizophreni\* or Adrenoleukodystrophy or Mucopolysaccharidosis)  
 #5 #1 or #2 or #3 or #4  
 #6 MeSH descriptor: [Melatonin] explode all trees  
 #7 (melatonin\* or Circadin\* or Slenyto\* or (Methoxy near Acetyl near tryptamin\*))  
 #8 #6 or #7  
 #9 #5 and #8  
 #10 MeSH descriptor: [Adolescent] explode all trees  
 #11 MeSH descriptor: [Child] explode all trees  
 #12 MeSH descriptor: [Infant] explode all trees  
 #13 MeSH descriptor: [Pediatrics] explode all trees  
 #14 (baby or babies or infan\* or child\* or toddler\* or pre-school\* or preschool\* or adolescen\* or teen\* or schoolchild\* or schoolage\* or pediatric\* or paediatric\*)  
 #15 #10 or #11 or #12 or #13 or #14  
 #16 #9 and #15

**MEDLINE Ovid (1946 to the date of the search)**

1. exp Neurodevelopmental Disorders/
2. exp Central Nervous System Diseases/
3. exp Intellectual Disability/
4. (((neurodevelopment\* or neurotic\* or development\* or mental\* or central nervous system or cns or intellectual\* or ((disruptive or child) and behavio\*) or Communicati\* or speech\* or language or Learning or Motor\* or psychomotor or Reactive Attachment\* or Stereotypic Movement\*) and (disease\* or disorder\* or disabilit\* or syndrom\* or dysfunc\* or impair\* or deficienc\* or retardation\*)) or neurodisabilit\* or neuro-disabilit\* or idiocy or dyslexia or dyscalculia or autis\* or kanner\* or ASD or Asperger\* or attention deficit\* or ADHD\* or ADDH or hyperactivity\* or impulsiv\* cerebral pals\* or spastic displeg\* or epilep\* or mutism\* or tic\* or Tourette\* or ((happy or child\*) and puppet\*) or fragile x or Frax\* or angelman\* or prader-willi\* or rett\* or smith-magenis or williams or Cri-du-Chat or De Lange or down\* or Coffin-Lowry or Lesch-Nyhan or Menkes Kinky Hair or Rubinstein-Taybi or WAGR or schizophreni\* or Adrenoleukodystrophy or Mucopolysaccharidosis).mp. [mp=title, abstract, original title, name of substance word, subject heading word, floating sub-heading word, keyword heading word, organism supplementary concept word, protocol supplementary concept word, rare disease supplementary concept word, unique identifier, synonyms]
5. 1 or 2 or 3 or 4
6. exp Melatonin/
7. (melatonin\* or Circadin\* or Slenyto\* or 5-Methoxy-N-Acetyltryptamin\* or N-Acetyl-5-Methoxytryptamin\*).mp. [mp=title, abstract, original title, name of substance word, subject heading word, floating sub-heading word, keyword heading word, organism supplementary concept word, protocol supplementary concept word, rare disease supplementary concept word, unique identifier, synonyms]
8. 6 or 7
9. 5 and 8
10. exp adolescent/ or exp child/ or exp infant/
11. exp Pediatrics/
12. (baby or babies or infan\* or child\* or toddler\* or pre-school\* or preschool\* or adolescen\* or teen\* or schoolchild\* or schoolage\* or pediatric\* or paediatric\*).mp. [mp=title, abstract, original title, name of substance word, subject heading word, floating sub-heading word, keyword heading word, organism supplementary concept word, protocol supplementary concept word, rare disease supplementary concept word, unique identifier, synonyms]

13. 10 or 11 or 12
14. 9 and 13
15. (randomized controlled trial or controlled clinical trial or retracted publication or retraction of publication).pt. or clinical trials as topic.sh. or trial.ti.
16. (random\* or blind\* or placebo\*).mp. [mp=title, abstract, original title, name of substance word, subject heading word, floating sub-heading word, keyword heading word, organism supplementary concept word, protocol supplementary concept word, rare disease supplementary concept word, unique identifier, synonyms]
17. 14 and (15 or 16)

#### Embase Ovid (1974 to the date of the search)

1. exp mental disease/
2. exp central nervous system disease/
3. exp intellectual impairment/
4. (((neurodevelopment\* or neurotic\* or development\* or mental\* or central nervous system or cns or intellectual\* or ((disruptive or child) and behavior\*) or Communicati\* or speech\* or language or Learning or Motor\* or psychomotor or Reactive Attachment\* or Stereotypic Movement\*) and (disease\* or disorder\* or disabilit\* or syndrom\* or dysfunc\* or impair\* or deficienc\* or retardation\*)) or neurodisabilit\* or neuro-disabilit\* or idiocy or dyslexia or dyscalculia or autism\* or kanner\* or ASD or Asperger\* or attention deficit\* or ADHD\* or ADDH or hyperactivity\* or impulsiv\* cerebral pals\* or spastic dispieg\* or epilep\* or mutism\* or tic\* or Tourette\* or ((happy or child\*) and puppet\*) or fragile x or Frax\* or angelman\* or prader-willi\* or rett\* or smith-magenis or williams or Cri-du-Chat or De Lange or down\* or Coffin-Lowry or Lesch-Nyhan or Menkes Kinky Hair or Rubinstein-Taybi or WAGR or schizophreni\* or Adrenoleukodystrophy or Mucopolysaccharidosis).mp. [mp=title, abstract, heading word, drug trade name, original title, device manufacturer, drug manufacturer, device trade name, keyword heading word, floating subheading word, candidate term word]
5. 1 or 2 or 3 or 4
6. exp melatonin/
7. (melatonin\* or Circadin\* or Slenyto\* or 5-Methoxy-N-Acetyltryptamin\* or N-Acetyl-5-Methoxytryptamin\*).mp. [mp=title, abstract, heading word, drug trade name, original title, device manufacturer, drug manufacturer, device trade name, keyword heading word, floating subheading word, candidate term word]
8. 6 or 7
9. 5 and 8
10. exp adolescent/ or exp child/
11. exp pediatrics/
12. (baby or babies or infan\* or child\* or toddler\* or pre-school\* or preschool\* or adolescen\* or teen\* or schoolchild\* or schoolage\* or pediatric\* or paediatric\*).mp. [mp=title, abstract, heading word, drug trade name, original title, device manufacturer, drug manufacturer, device trade name, keyword heading word, floating subheading word, candidate term word]
13. 10 or 11 or 12
14. 9 and 13
15. Randomized controlled trial/ or Controlled clinical trial/ or retracted article/ or (erratum or tombstone).pt. or trial.ti. or yes.ne.
16. (random\* or blind\* or placebo\*).mp. [mp=title, abstract, heading word, drug trade name, original title, device manufacturer, drug manufacturer, device trade name, keyword heading word, floating subheading word, candidate term word]
17. 14 and (15 or 16)

#### LILACS (Bireme; 1982 to the date of the search)

(((neurodevelopment\$ or neurotic\$ or development\$ or mental\$ or central nervous system or cns or intellectual\$ or ((disruptive or child) and behavior\$) or Communicati\$ or speech\$ or language or Learning or Motor\$ or psychomotor or Reactive Attachment\$ or Stereotypic Movement\$) and (disease\$ or disorder\$ or disabilit\$ or syndrom\$ or dysfunc\$ or impair\$ or deficienc\$ or retardation\$)) or neurodisabilit\$ or neuro-disabilit\$ or idiocy or dyslexia or dyscalculia or autism\$ or kanner\$ or ASD or Asperger\$ or attention deficit\$ or ADHD\$ or ADDH or hyperactivity\$ or impulsiv\$ cerebral pals\$ or spastic dispieg\$ or epilep\$ or mutism\$ or tic\$ or Tourette\$ or ((happy or child\$) and puppet\$) or fragile x or Frax\$ or angelman\$ or prader-willi\$ or rett\$ or smith-magenis or williams or Cri-du-Chat or De Lange or down\$ or Coffin-Lowry or Lesch-Nyhan or Menkes Kinky Hair or Rubinstein-Taybi or WAGR or schizophreni\$ or Adrenoleukodystrophy or Mucopolysaccharidosis) [Words] and (melatonin\$ or Circadin\$ or Slenyto\$ or 5-Methoxy-N-Acetyltryptamin\$ or N-Acetyl-5-Methoxytryptamin\$) [Words] and (baby or babies or infan\$ or child\$ or toddler\$ or pre-school\$ or preschool\$ or adolescen\$ or teen\$ or schoolchild\$ or schoolage\$ or pediatric\$ or paediatric\$) [Words]

#### PsycINFO (EBSCO Host; date will be given at review stage)

S11 S9 AND S10

S10 TX (random\* or blind\* or placebo\* or trial\*)  
 S9 S5 AND S8  
 S8 S6 OR S7  
 S7 TX (melatonin\* or Circadin\* or Slenyto\* or 5-Methoxy-N-Acetyltryptamin\* or N-Acetyl-5-Methoxytryptamin\*)  
 S6 MA Melatonin  
 S5 S1 OR S2 OR S3 OR S4  
 S4 TX (((neurodevelopment\* or neurotic\* or development\* or mental\* or central nervous system or cns or intellectual\* or ((disruptive or child) and behavio\*) or Communicati\* or speech\* or language or Learning or Motor\* or psychomotor or Reactive Attachment\* or Stereotypic Movement\*) and (disease\* or disorder\* or disabilit\* or syndrom\* or dysfunc\* or impair\* or deficienc\* or retardation\*)) or neurodisabilit\* or neuro-disabilit\* or idiocy or dyslexia or dyscalculia or autism\* or kanner\* or ASD or Asperger\* or attention deficit\* or ADHD\* or ADDH or hyperactivity\* or impulsiv\* cerebral pals\* or spastic displeg\* or epilep\* or mutism\* or tic\* or Tourette\* or ((happy or child\*) and puppet\*) or fragile x or Frax\* or angelman\* or prader-willi\* or rett\* or smith-magenis or williams or Cri-du-Chat or De Lange or down\* or Coffin-Lowry or Lesch-Nyhan or Menkes Kinky Hair or Rubinstein-Taybi or WAGR or schizophreni\* or Adrenoleukodystrophy or Mucopolysaccharidosis)  
 S3 MA Intellectual Disability  
 S2 MA Central Nervous System Diseases  
 S1 MA Neurodevelopmental Disorders

**Science Citation Index Expanded (1900 to the date of the search) and Conference Proceedings Citation Index – Science (1990 to the date of the search) (Web of Science)**

#5 #4 AND #3 AND #2 AND #1

#4 TI=(random\* or blind\* or placebo\* or trial\*) OR TS=(random\* or blind\* or placebo\*)

#3 TS=(baby or babies or infan\* or child\* or toddler\* or pre-school\* or preschool\* or adolescen\* or teen\* or schoolchild\* or schoolage\* or pediatric\* or paediatric\*)

#2 TS=(melatonin\* or Circadin\* or Slenyto\* or 5-Methoxy-N-Acetyltryptamin\* or N-Acetyl-5-Methoxytryptamin\*)

#1 TS=(((neurodevelopment\* or neurotic\* or development\* or mental\* or central nervous system or cns or intellectual\* or ((disruptive or child) and behavio\*) or Communicati\* or speech\* or language or Learning or Motor\* or psychomotor or Reactive Attachment\* or Stereotypic Movement\*) and (disease\* or disorder\* or disabilit\* or syndrom\* or dysfunc\* or impair\* or deficienc\* or retardation\*)) or neurodisabilit\* or neuro-disabilit\* or idiocy or dyslexia or dyscalculia or autism\* or kanner\* or ASD or Asperger\* or attention deficit\* or ADHD\* or ADDH or hyperactivity\* or impulsiv\* cerebral pals\* or spastic displeg\* or epilep\* or mutism\* or tic\* or Tourette\* or ((happy or child\*) and puppet\*) or fragile x or Frax\* or angelman\* or prader-willi\* or rett\* or smith-magenis or williams or Cri-du-Chat or De Lange or down\* or Coffin-Lowry or Lesch-Nyhan or Menkes Kinky Hair or Rubinstein-Taybi or WAGR or schizophreni\* or Adrenoleukodystrophy or Mucopolysaccharidosis)